

Date: Sat, 22 Oct 94 21:29:04 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: List
Subject: Info-Hams Digest V94 #1146
To: Info-Hams

Info-Hams Digest Sat, 22 Oct 94 Volume 94 : Issue 1146

Today's Topics:

ARRL BBS, Windows Software for Hams...
ARRL to change "Silent Keys" label in QST?
De-Emphasis, Cutoff Freq
Drake

rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)
This Week in Amateur Radio - In band audio bulletin service Edition 82

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Oct 1994 23:01:05 -0400
From: singho@aol.com (Singho)
Subject: ARRL BBS, Windows Software for Hams...

Just wanted to pass on the ARRL BBS number its: 203-666-0578
and to also recomend a new program for ham radio repeater frequencies,
it's a Windows program for repeater frequencies, it's set up like the ARRL
directory as far as data fields, real well done, check it out! (It's on
the ARRL BBS in the General Intrest Files section (I think). The file
name is RBASE11.ZIP, I think it's also on Compuserve, and it's on AOL in
the Ham Radio Files Section in the MS-DOS file library.

Date: 22 OCT 94 21:11:07 EST
From: hutzley@ranger.enet.dec.com (Steve Hutzley)
Subject: ARRL to change "Silent Keys" label in QST?

In article <Z88Uiq+.leevankoten@delphi.com>, Leland Van Koten
<leevankoten@delphi.com> writes...

>There are lids among the no-code techs., but they sure don't have a monopoly on
>them. In fact, given what I hear on the air and the numbers of people with
>the various license classes, I wonder if there may not be more lids per capita
>among Extras than any other class. I doubt it, but it wouldn't shock me if it
>were true.

>

>

Lee, KE3FB in Md.

>

LEE, THANK YOU!.....There are lids everywhere!....NO
CODE TECHS ARE NOT (as a whole) LIDS!!!!!! We just chose to
come into the hobby a 'differnet way' than others. There is
one fellow on the local repeater who came in as a NO CODE 2
years ago and is now an ADVANCED. I am really getting sick of
the NO CODE bashing!

Steve/N1TEC

Date: Sat, 22 Oct 1994 21:06:00 GMT
From: tom.alldread@kbsbbs.com (Tom Alldread)
Subject: De-Emphasis, Cutoff Freq

GJ>I've been trying to find out what the "spec" cutoff frequency is for
GJ>NBFM de-emphasis. I've browsed through a few books, but they only
GJ>mention WBFM de-emphasis.

GJ>Thanks,

Greetings Gerald:

I have a couple of old ARRL publications that indicate a 75 usec
pre/de-emphasis curve is recommended for NBFM. My REFERENCE DATA FOR
RADIO ENGINEERS manual by ITT shows a curve for a 75 uSec de-emphasis
network. It starts to roll off at about 800 Hz, it is about 3 dB down at
2 KHz, 7dB at 4 KHz, 14 dB at 10 KHz and 20 dB down at 20 KHz. The ARRL
FM and Repeater Handbook shows a de-emphasis circuit made from a 75 KOhm
resistor feeding a shunt capacitor of 0.01 uF. This circuit assumes a
low source impedance and a high load impedance.

I hope this information is useful.

Best Wishes,
T.M. Alldread
R.R.#4, Site 430, C7
Courtenay, B.C., Canada, V9N-7J3
INTERNET : tom.alldread@kbsbbs.com
packet radio: VE7TMA@VE7UBC.#VANC.BC.CAN.NA
Tel.(604)337-5577

**

* CmpQwk #UNREG* UNREGISTERED EVALUATION COPY

Date: Fri, 21 Oct 1994 21:22:09 GMT
From: sparker@phoenix.Princeton.EDU (Scott E. Parker)
Subject: Drake

Can somebody give me info on the Drake Net that I think meets on 80 meters?

I'm trying to track down a good place to get my TR-4C repaired.

Or can you give me the name of a good repair person close to
the Princeton area (the radio and supply are very heavy)?

Thanks very much for your help.

Please send email to sparker@theory.pppl.gov

Date: Sat, 22 Oct 1994 05:13:11 GMT
From: ikluft@oes.amdahl.com (Ian Kluft)
Subject: rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)

Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/faq/part1
Revision: 1.6 10/16/94 03:00:55

Rec.radio.amateur.misc Frequently Asked Questions
Part 1 - Introduction to the FAQ and Amateur Radio

This is a regular posting of frequently-asked questions (FAQ) about Amateur
Radio, also known as Ham Radio. It is intended to summarize some common
questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list
as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good signal-to-noise ratio in the newsgroup. However, they can't do it alone - you, the reader, have to use them.

- * If you are a new user, please print and review the FAQ articles and look at the instructions in the news.announce.newusers newsgroup before posting any articles. If you don't find the answer in the FAQ and you have tried elsewhere, then you have "done your homework" and it is acceptable to ask the question on the UseNet newsgroups. Along with your question, please state where else you have looked for the answer so others also know that you have done your homework.
- * If you are an experienced user, please help by refraining from answering frequently-asked questions on the newsgroup if they are already answered by the FAQ articles. Instead, send e-mail to the user who asked the question. (It will be helpful if you include the part of the FAQ that answers their question, but not the whole thing.)

The FAQ cannot always prevent people from posting repetitive questions. But even if hundreds of questions get posted, it saves you from having to answer them hundreds of times. Also, a friendly pointer to the FAQ in your first answer can help that person refer to the FAQ in the future. That is when we can begin to get a real savings of network bandwidth.

To reduce the size of each article, the FAQ information is posted in 3 parts:
Part 1 - Introduction to the FAQ and Amateur Radio
Part 2 - Amateur Radio Organizations, Services, and Information Sources
Part 3 - Amateur Radio Advanced and Technical Questions

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--Rec.radio.amateur.misc Frequently-asked Questions-----Part 1--

** Introduction to the FAQ

* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please consider that all new contributions need to be SHORT and concise in order to be included. If a contribution is too long, the FAQ editors can help you find a more appropriate FTP archive or mail server for your article.

We always accept corrections. Please allow some time (often not the next issue of the FAQ) because the FAQ maintainers do this as volunteers so each must give higher priority to their employers.

Send correspondence to hamradio-faq@amdahl.com so that it will reach all the FAQ coordinators: (listed in alphabetical order)

| | | | |
|----------------|--------|--|------------------------|
| Ed Hare | KA1CV | ehare@arrl.org | (Newington, CT, USA) |
| Jack GF Hill | W4PPT | root@jackatak.raider.net | (Brentwood, TN, USA) |
| Ian Klufft | KD6EUI | iklufft@oes.amdahl.com | (Santa Clara, CA, USA) |
| Paul Schleck | KD3FU | pschleck@gonix.com | (Omaha, NE, USA) |
| Chris Swartout | N6WCP | cas30@uts.amdahl.com | (San Jose, CA, USA) |
| Steve Watt | KD6GGD | steve@wattres.sj.ca.us | (San Jose, CA, USA) |
| Rosalie White | WA1STO | rwhite@arrl.org | (Newington, CT, USA) |
| Derek Wills | AA5BT | oo7@astro.as.utexas.edu | (Austin, TX, USA) |

★ Please Send Questions to the Newsgroups, Not the Editors

We wish it wasn't necessary to say this. Please don't send questions to the editors (unless you are sending an answer with it as a submission for the FAQ.) The proper procedure for questions on UseNet is

- 1) Read the FAQ
- 2) if it isn't there, check other sources (see Part 2 of the FAQ for electronic sources including Mosaic/WWW)
- 3) post on the newsgroup

The Internet has become an atmosphere where questions are asked of everyone as if they have an infinite amount of time to help. The volunteers who maintain the FAQ do not have time to answer questions. Some FAQ maintainers on other newsgroups have been led to believe that no good deed goes unpunished - let's avoid bringing the same end to this effort.

★ Call for FAQ Editors

As with any volunteer effort, new volunteers are often needed. The previous paragraph may have already given a hint about this: we need a new editor to post the Ham Radio FAQ. Preferably this should be someone who has enthusiasm for Ham Radio, experience with UseNet, and the ability to work with the other editors. No single person can know all the various aspects of this diverse hobby so the editorial review group is intended to make a greater combination of experience.

The FAQ is currently posted with the AUTO-FAQ software, which is written in PERL. So it would be a plus for volunteers to post the FAQ to have PERL installed on their system and be able to use "cron" or "at" so that postings can go unattended.

Anyone who wants to make their contribution to the Net as a volunteer should contact hamradio-faq@amdahl.com.

★ Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana Carlson KC1SP's work or her editing of a contributor's work. Diana established this FAQ and credit is due to her for founding this project.

Thanks to Devon Bowen KA2NRC for accepting this FAQ in e-mail every month to keep the FTP archive at <ftp.cs.buffalo.edu> up-to-date.

★ Notes on "Netiquette"

The rec.radio.amateur.misc newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.

- * If you are new to UseNet, the introductory articles in news.announce.newusers are required reading. Go to that newsgroup now. Definitely, read the instructions there before posting anything. Other rec.radio.amateur.* readers will appreciate it!
- * Pick the right newsgroup. Use only the most specific newsgroup for your subject. For example, a question about a homebrew antenna only needs to be posted to rec.radio.amateur.antenna. Also, don't post to rec.radio.amateur.misc when the subject can go in another rec.radio.amateur.* newsgroup. So, when there is a more specific newsgroup, that's the one you want.
- * When posting a followup article, ALWAYS try to minimize the number of lines of quoted material from the original article.
- * As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.
- * Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
- * Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
- * If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't send a "nastygram" - that would just discourage future participation.)
- * Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than

just their own country.)

- * If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
- * Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

**** What is Amateur Radio?**

Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public events or in times of emergency or disaster.

**** Who can become a ham?**

The answer to this question differs in every country.

The answer for the USA is listed below. If your country has a newsgroup specifically for it (i.e. UK, Australia, Germany) the most accurate answers can be found there. See Part 2 for the list of region-specific newsgroups.

If that doesn't help, the American Radio Relay League (ARRL) may be able to help because they communicate with similar organizations in other countries, probably including yours. They can be reached by electronic mail or surface mail (see Part 2.)

In the USA, anyone who is not a representative of a foreign government can be an Amateur Radio operator. There are tests that you must pass to get a license, however the tests are not insurmountable. On that general level, the requirements are probably similar in almost every country.

For more information on becoming a Ham in the USA, the ARRL has a toll-free number where you can request information: 1-800-32-NEW-HAM (don't worry about the number being one digit too long - the phone system ignores it.) Other information can also be obtained from the ARRL e-mail information server in the file called PROSPECT. Details on the server are in Part 2.

**** Where can I locate information and books on Amateur Radio?**

Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail

from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around \$25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around \$32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

Information on Ham Radio can also be obtained with your computer. Part 2 of this FAQ contains a significant amount of material on that subject.

**** How much does it cost?**

To take the tests for any class of amateur radio license, there is a small charge (around \$5-\$6 currently) to cover copying costs and running the testing sessions. (Due to changes in 1993, Novice tests are under same procedures as the others.) The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under \$150. You can buy a used single-band radio for \$150-\$300. Or you can buy a new multi-band multi-mode radio with all the doodads for \$300-\$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

**** Where can I take the tests?**

The Novice tests Used to be given by any two qualified hams of General class license or above. Now all the license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact ARRL at 203-666-1541 x282.

See also the section "Where can I find VE sessions in my local area?" in Part 2 because more information is available via UseNet.

**** What are the tests like?**

First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen

and two pencils; the applicable examination fee (around \$5-\$6 for 1993); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code test.

The Morse code test is a receiving test only. The test run 5 to 7 minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:

26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).

The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next" is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

★★ What can I do with a ham radio license?

There are so many things, it's a difficult question to answer, but here's some ideas:

- * Talk to people in foreign countries.
- * Talk to people (both local and far away) on your drive to work.
- * Help in emergencies by providing communications.

- * Provide communications in parades or walkathons.
- * Help other people become hams.
- * Hook your computer to your radio and communicate by computers.
- * Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
- * Participate in contests or Field Day events.
- * Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).
- * Aid members of the US military by joining MARS (Military Affiliate Radio System).
- * Participate in transmitter hunt games and maybe build your own direction-finding equipment.
- * Have someone to talk to on those sleepless nights at home.
- * Receive weather pictures via satellites.
- * Build radios, antennas, learn some electronics and radio theory.
- * Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
- * Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.
- * Experiment with amateur satellite communications.

** What can't I do with an Amateur Radio license?

The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

** I'm interested, who will help me?

There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to

elmers-request@unomaha.edu

There is also a lot to be said for exploring on your own. Take a look around the FTP archives and e-mail servers listed in Part 2. There's so much out there on UseNet, you'll find plenty of things you're interested in.

** Should I build my own equipment or antenna?

[see also rec.radio.amateur.homebrew and rec.radio.amateur.antenna]
 "Homebrewing" is a fun and educational part of ham radio. It is a

thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a homebrew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples of 1/4 of that wavelength, though 5/8 wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

wavelength (in meters) = 300 / frequency (in megahertz)

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

Date: Sat, 22 Oct 94 22:04:54 -0500

From: kxkvi@delphi.com

Subject: This Week in Amateur Radio - In band audio bulletin service Edition 82

Here is a summary of news items covered on Edition #82 of "This Week in Amateur Radio", North America's satellite-delivered audio bulletin service,

for the week ending 28-Oct:

1. FCC Declares Communications Emergency in Texas, Net Frequencies Listed
2. Astronomers Watch Trajectory of Comet Machholtz-2 Entering Earth Orbit
3. TAPR Announces Annual Meeting for March 1995 in St. Louis
4. FAA and FCC Review Tower Marking and Lighting Specs, Responsibility
5. Weekly Propagation Forecast with George Bowen, N2LQS
6. AMSAT Holds Annual Meeting in Orlando, Phase 3-D Satellite Progresses
7. "EZSATS" with Dave Mullenix, N9LTD
8. Upcoming Special Event Stations
9. "Amateur Radio Newsline" - Edition #897 from Los Angeles
10. FCC Kansas City and Anchorage Offices Respond to Interference Problems
11. "Gateway 160 Meter Net Report" with Vern Jackson, WA0RCR
12. "The RAIN Dial-up" from Chicago
13. "Are Non-ham Related Packet Bulletins Legal?" - Next Week with KM6PX

Aquisition and retransmission costs for "Newsline" were provided by the Stoddard family and members of the KF9MP repeater system, of North Webster, Indiana.

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